

ACADEMIC STANDARDS AND QUALITY ENHANCEMENT COMMITTEE

10 March 2020

Agenda Item 6.1

DEPARTURES AND VARIATIONS FROM THE UNIVERSITY'S REGULATORY  
FRAMEWORK: BSc (Hons) Biomedical Science (Life Sciences)

Item referred by the Faculty of Life and Health Sciences

Approval sought for exit awards with a different title to the main award

Main Award: BSc (Hons) Biomedical Science (Life Sciences)

Exit Awards: Associate Degree in Biomedical and Bio-industrial Studies and Foundation  
Degree in Biomedical and Bio-industrial Studies

*Presenter: Professor A McKillop*

COVER SHEET

Action is required of the Committee as indicated below.

To consider authorisation of the above mentioned exit award titles for the BSc Hons  
Biomedical Science (Life Sciences) degree.

# UNIVERSITY OF ULSTER

## ACADEMIC STANDARDS AND QUALITY ENHANCEMENT COMMITTEE

10 March 2020

Exit award titles on BSc (Hons) Biomedical Science (Life Sciences) proposal

### Background

1 The Ulster University award BSc (Hons) Biomedical and Healthcare Sciences degree was validated in February 2015 with 2 exit awards whose title differed from the main award title. As part of the Academic Office condition, the Course Team was required to submit a case to ASQEC which was approved for the following title of the two exit awards:

- Associate Bachelors in Biomedical and Bio-industrial Studies
- Foundation Degree in Biomedical and Bio-industrial Studies

2 Whilst discussions with the Institute of Biomedical Science (IBMS) influenced Ulster University and IT Sligo in their decision to plan and validate the BSc (Hons) Biomedical and Healthcare Sciences degree, it was decided not to seek IBMS involvement as an integral part of the validation process but to gain validation and then seek accreditation of the programme by the IBMS.

3 IBMS accreditation of BSc (Hons) Biomedical and Healthcare Sciences was vital to meet the needs of biomedical science support workers in the NHS who seek a degree pathway to support their career progression as a biomedical science trainee, with the ultimate goal of becoming a registered biomedical scientist. The importance of IBMS accreditation of this programme was reported during student-staff consultation with the Year 1 BSc (Hons) Biomedical and Healthcare Sciences students in semesters 1 and 2, 2016-17.

4 An IBMS accreditation event for the BSc (Hons) Biomedical & Healthcare Sciences degree took place on 14<sup>th</sup> February 2018. A recommendation from the IBMS panel stated "Consider removing 'healthcare science' from the title as the generic nature of this (i.e. covering physiological and physical sciences) is not reflected in the curriculum. Suggested alternatives are *Biomedical Science (distance learning)*, *Biomedical Science and Healthcare* or *Biomedical Science (Life Sciences)*. In response to the IBMS, the Course Team agreed to remove 'healthcare science' from the Course Title and a new BSc Hons Biomedical Science (Life Sciences) course title was proposed. Agreement of external examiners and students for the name change was obtained as part of the CA3 form process, and subsequent university approval was obtained for the name change commencing 2018/19. Whilst the title of the main award changed in 2018/19, the title of the two exit awards remained unchanged. Furthermore, Ulster University did not seek IBMS approval for these two exit awards.

5. In November 2019, the Ulster University award BSc (Hons) Biomedical Science (Life Sciences) degree was revalidated as part of the 3C1B Biomedical Science [DL/Sligo] Subject Unit. The 3C1B Subject Unit Revalidation Panel set a condition for the title of the exit awards from BSc Hons Biomedical Science (Life Sciences) to be reviewed, including the possibility of their accreditation by the IBMS. As part of the Academic Office condition, if the Course Team decided that they wished to keep the different title from the main award then a case needed to be made ASQEC

## **Review of exit awards**

6 BSc (Hons) Biomedical Science (Life Sciences) is a four-year part time, distance learning programme integrating theory and practice in a range of biomedical science subjects and complementary research studies, leading to the award a Bachelor of Science Degree with Honours in Biomedical Science (Life Sciences). To support the career development of biomedical professionals working in clinical settings, particularly associate practitioners in the NHS pathology workforce, it is vital that the student successfully complete all 4 years of the degree so that all academic requirements are met for Health & Care Professions Council (HCPC) registration as a Biomedical Scientist. Thus students are not motivated to seek a lower level exit award unless faced with changing personal/employment circumstances or failure within the course.

7 BSc (Hons) Biomedical Science (Life Sciences) is one of three programmes within the 3C1B Biomedical Sciences [DL/Sligo] Subject Unit and any review of exit awards also needs to consider the IT Sligo award BSc (Hons) Biomedical and Bio-industrial Sciences degree. It also important to stress that Ulster University and IT Sligo are equal partners within the 3C1B Biomedical Sciences [DL/Sligo] Subject Team. This Subject Team decided on 4 exit awards, 2 from Ulster University which satisfied the Qualification and Credit Framework England/Northern Ireland (QCF) and 2 from IT Sligo which satisfied the National Framework of Qualifications for Ireland (NFQ IE)

- Higher Certificate in Biomedical Studies (IT Sligo award).
- Associate Bachelor's Biomedical and Bio-industrial Studies (Ulster University award).
- Foundation Degree in Biomedical and Bio-industrial Studies (Ulster University award).
- BSc Ordinary degree in Biomedical and Bio-industrial Studies (IT Sligo award).

8 As can be seen from Appendix 1, where the course structure of each exit award is presented, a student will require between 2 and 3 years of successful study to be eligible for an exit award. It is also important to note that course structure for Years 1, 2 and 3 on the BSc (Hons) Biomedical Science (Life Sciences) and BSc (Hons) Biomedical and Bio-industrial Sciences programmes are the same. Thus when selecting an appropriate title for each exit award there was no justification that the title for an Ulster University exit award on the BSc (Hons) Biomedical Science (Life Sciences) degree must differ from the title for an IT Sligo exit award on the BSc (Hons) Biomedical and Bio-industrial Sciences degree

9 The academic requirements for IBMS course accreditation are summarized in Appendix 2. This clearly shows that the curriculum in years 1, 2 and 3 of the BSc (Hons) Biomedical Science (Life Sciences) degree does not meet the basic knowledge requirements of the IBMS never mind making a contribution to meeting the requirements of the IBMS within Clinical Laboratory Specialities and Integrated Studies. The basic knowledge deficiency in microbiology and immunology, and relative lack of clinically focused content in years 2 and 3 of the course meant that neither the Associate Bachelor's nor the Foundation Degree exit awards were in a position to justify consideration for IBMS accreditation. Discussions with Alan Wainwright, IBMS Executive Head of Education, supported this conclusion. Whilst the IBMS was committed to accreditation of sub degrees, and in particular the Foundation degree which includes a substantive element of work based learning, the design of our curriculum at QCF levels 4 and 5 was deficient in meeting sufficient IBMS academic requirements. The design of our curriculum at QCF levels 4 and 5 reflected the strengths in the available biomedical and bio-industrial module database at IT Sligo and strengths of Ulster University to provide Clinical Laboratory Specialities, including basic knowledge in immunology and microbiology, and Integrated Studies though its available QCF level 6 module database.

## **Case for different title to main exit award**

10 Biomedical Science is a protected title based around the academic requirements of an IBMS accredited degree. In point 7 above, the deficiency in IBMS basic knowledge requirements and relative lack of clinically focused content within the QCF levels 4 and 5 curriculum making up the Associate Bachelor's and Foundation Degree qualifications has already been established (see Appendices 1 and 2). Thus, the IBMS does not allow the use of Biomedical Science (Life Sciences) as the title for both the Ulster University exit awards.

11 In point 7 above, it has already been established that the curriculum at QCF levels 4 and 5 which make up the Ulster University exit awards reflect the strengths in the available biomedical and bio-industrial module database at IT Sligo. Within the Associate Bachelor's exit award, 75% of the level 4 credits and 67% of the level 5 credits are delivered by IT Sligo, and the content is best reflected in the title "Biomedical and Bio-industrial Studies". Within the Foundation Degree award, 75% of the level 4 credits and 40% of the level 5 credits are delivered by IT Sligo, and a further 40% of level 5 credits are Work based Learning in Biomedical Sciences, so once again the content is best reflected in the title "Biomedical and Bio-industrial Studies".

### **Faculty Support for the Proposal**

12 The Faculty fully supports the proposal to seek approval from ASQEC that a different title, namely, "Biomedical and Bio-industrial Studies" be used for the 2 exit awards (Associate Bachelor's and Foundation Degree) associated with the main award degree, BSc (Hons) Biomedical Science (Life Sciences).

### **Requested Institutional Support for the Proposal**

13 ASQEC approval is requested to allow a different title, namely, "Biomedical and Bio-industrial Studies" be used for the 2 exit awards (Associate Bachelor's and Foundation Degree) associated with the main award degree, BSc (Hons) Biomedical Science (Life Sciences).

### Appendix 1: Course Structure for the 4 Exit Awards within the 3C1B Biomedical Sciences [DL/Sligo/] Subject Unit

Year/ Semester	QCF/NFQ IE Levels	QCF/NFQ IE Credit Value	Module Title	Code	Higher Cert Biomedical Studies	Ass Bach Biomedical & Bio- industrial Studies	FdSc Biomedical & Bio-industrial Studies	BSc Ord Biomedical & Bio- industrial Studies
1/1	4/6	10/5	Applied Mathematics (MATH06078)	BMS126	X	X	X	X
1/1	4/6	15/10	Information Systems (COMP06018)	BMS125	X	X	X	X
1/1	4/6	10/5	Biology (BIOL06013)	BMS124	X	X	X	X
1/2	4/6	20/10	Science Laboratory Skills 1 (SCI06015)	BMS129	X	X	X	X
1/2	4/6	10/5	Fundamentals of Chemistry (CHEM06043)	BMS128	X	X	X	X
1/2	4/6	15/10	Good Manufacturing Practice 1 (GMP06001)	BMS127	X	X	X	X
2/1	4/6	10/5	Biochemistry (BIOC06007)	BMS130	X	X	X	X
2/1	4/6	20/10	Physiology and Anatomy of the Human Body	BMS120	X	X	X	X
2/1	5/7	15/10	Biomedical Science Laboratory Skills 1 (SCI06016)	BMS336	X	X	X	X
2/2	4/6	10/5	Introduction to Biomedical Science	BMS131	X	X	X	X
2/2	5/7	15/10	Scientific Communication (BIO06031)	BMS337	X	X	X	X
2/2	5/7	20/10	Exploitation of Biology	BIO332	X	X	X	X
2/3	5/7	40/25	Work Based Learning in Biomedical Sciences	BMS342	X		X	X
3/1	5/7	10/5	Biomedical Science Laboratory Skills 2 (SCI07016)	BMS339		X	X	X
3/1	5/7	10/5	Enterprise in Biomedical Sciences	BMS338		X		X
3/1	5/7	20/10	Molecular Biology and Genetics	BIO318		X	X	X
3/2	5/7	10/5	Research Skills in Biomedical Sciences	BMS344		X		X
3/2	5/7	10/5	Bioanalytics (BIO07014)	BMS341		X		X
3/2	5/7	10/5	Pharmaceutical Quality Systems (BIO07030)	BMS340		X		X
3/2	6/7	10/5	Professional Practice in Healthcare Science	BMS503				X
3/3	5/7	40/20	Biomedical Investigations (SCI07017)	BMS343				X
Credit Framework of Each Exit Award					65 ECTS (6)	120 (4)	120 (4)	65 ECTS (6)
NQF IE ECTS (level) / QCF credit value (level)					55 ECTS (7)	120 (5)	120 (5)	115 ECTS (7)

Please note: A Module Title followed by a code in brackets, e.g. Biology (BIOL06013), is a module delivered by IT Sligo and a Module Title not followed by a code in brackets, e.g. Introduction to Biomedical Science, is a module delivered by Ulster University

## Appendix 2: Academic Requirements for IBMS course accreditation

<i>Core areas that underpin the key laboratory specialities</i>	<i>Where IBMS required basic knowledge is met?</i>
Human Anatomy and Physiology	Year 2 (BMS120)
Biochemistry	Year 2 (BMS130)
Cell Biology	Year 1 (BMS124)
Molecular Biology and Genetics	Year 3 (BIO318)
Immunology	Year 4 (BMS525)
Microbiology	Year 2 (BMS524)
<i>Clinical Laboratory Specialities which address disease processes in the context of laboratory investigation</i>	<i>Where IBMS required knowledge and understanding is met?</i>
Cellular Pathology	Year 4 (BMS527)
Clinical Biochemistry	Year 4 (BMS516)
Clinical Genetics	Year 3 (BIO318)
Clinical Immunology	Year 4 (BMS525)
Haematology	Year 4 (BMS514)
Transfusion Science	Year 4 (BMS514)
Medical Microbiology	Year 4 (BMS524)
<i>Integrated studies in which the clinical laboratory specialities are represented in a system-led approach</i>	<i>Where IBMS required knowledge and understanding is met?</i>
Study of disease and its treatment	Year 4 (BMS502)
<i>Subject specific-skills</i>	<i>Where IBMS required knowledge and understanding is met?</i>
Ability to practice professionally and ethically, and in compliance with health safety policies	Year 2 (BMS131) Year 4 (BMS503)
Discipline and subject-specific skills associated with laboratory practice	Years 1, 2 & 3 (BMS129, BMS336, BMS339 & BIO318) Year 4 (BMS514, BMS524, BMS516 & BMS527)
Research Skills	Year 3 (BMS344)
Successfully execute a research project	Year 4 (BMS525)
<i>Generics skills</i>	<i>Where IBMS required skills are developed?</i>
Communication	Year 2 (BMS337, BIO332) Year 3 (BIO318, BMS338) Year 4 (All modules)
Information Technology	Year 1 (BMS125) Year 3 (BIO318, BMS344) Year 4 (BMS537)
Numeracy	Year 1 (BMS126, BMS128, BMS129)
Data Analysis	Year 2 (BMS336); Year 3 (BMS339, BIO318, BMS344) Year 4 (BMS524, BMS516, BMS537)
Team Working	Year 2 (BMS337) Year 3 (BMS338)
Reflection	Year 2 (BMS337, BIO332) Year 4 (BMS503)